

AMENDMENTS TO THE CLAIMS

Claims 1-5, 23-27, 45, 47-48, 50-51 and 53-58 are pending. Claim 59 is cancelled. A complete listing of the current pending claims is provided below and supersedes all previous claims listing(s).

1. (Previously Presented) A method for inspecting a mask having a plurality of individual mask elements, the method comprising:

generating integrated circuit design data including priority information of each individual mask element; and

using at least the priority information for determining interfeature relationships between each individual mask element of the integrated circuit design data to inspect the mask.

2. (Original) The method of claim 1, wherein the interfeature relationships are on one layer of the integrated circuit design.

3. (Original) The method of claim 1, wherein the interfeature relationships are across multiple layers of the integrated circuit design.

4. (Original) The method of claim 1, wherein the interfeature relationships comprise:

interfeature process proximity effects;  
interfeature coupling across layers;  
interfeature electronic relationships; or  
wire interconnects longer than a given length.

5. (Original) The method of claim 1, wherein the information for interfeature relationships includes information for identifying a redundancy of features, and using the information for interfeature relationships to inspect the mask further comprises:

determining that at least one feature is functional; and  
waiving one or more defects on features redundant to the functional feature.

6-22. (Cancelled)

23. (Previously Presented) A system for inspecting a mask having a plurality of individual mask elements, the system comprising:

means for generating integrated circuit design data including priority information of each individual mask element; and

means for using at least the priority information for determining interfeature relationships between each individual mask element of the integrated circuit design data to inspect the mask.

24. (Original) The system of claim 23, wherein the interfeature relationships are on one layer of the integrated circuit design.

25. (Original) The system of claim 23, wherein the interfeature relationships are across multiple layers of the integrated circuit design.

26. (Original) The system of claim 23, wherein the interfeature relationships comprise:

- interfeature process proximity effects;
- interfeature coupling across layers;
- interfeature electronic relationships; or
- wire interconnects longer than a given length.

27. (Original) The system of claim 23, wherein the information for interfeature relationships includes information for identifying a redundancy of features, and said means for using the information for interfeature relationships to inspect the mask further comprises:

- means for determining that at least one feature is functional; and
- means for waiving one or more defects on features redundant to the functional feature.

28-44. (Cancelled)

45. (Previously Presented) The method of claim 1, wherein using information for interfeature relationships comprises using information for interfeature relationships to inspect the mask by inspecting elements of the mask in an order based on the interfeature relationships.

46. (Cancelled)

47. (Previously Presented) The system of claim 23, wherein the means for using information for interfeature relationships of the integrated circuit design data determines an order of elements of the mask to be inspected based on the interfeature relationships.

48. (Previously Presented) The method of claim 1, wherein using information for interfeature relationships comprises using information for interfeature relationships to inspect the mask by adjusting the power of an inspection beam according to the interfeature relationships.

49. (Cancelled)

50. (Previously Presented) The system of claim 23, wherein the means for using information for interfeature relationships of the integrated circuit design data to inspect the mask adjusts the power of an inspection beam according to the interfeature relationships.

51. (Previously Presented) The method of claim 1, wherein portions of the mask are assigned different priorities according to the interfeature relationships.

52. (Cancelled)

53. (Previously Presented) The system of claim 23, wherein portions of the mask are assigned different priorities according to the interfeature relationships.

54. (Previously Presented) The method of claim 1, wherein the priority information includes information indicative of the importance of each individual mask element relative to each other individual mask element.

55. (Previously Presented) The method of claim 1, wherein the priority information includes information indicative of an inspection order for each individual mask element.

56. (Previously Presented) The method of claim 1, wherein generating integrated circuit design data includes impact information of a defect or a potential defect on or near each individual mask element.

57. (Previously Presented) The method of claim 56, wherein impact information is used for determining interfeature relationships between each individual mask element of the integrated circuit design data to inspect the mask.

58. (Previously Presented) The method of claim 56, wherein the impact information includes information indicative of the operative physics of each individual mask element.

59. (Cancelled)